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**Aggerholm et al.**

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(54) **HIGH STRENGTH BALLOON**

(56) **References Cited**

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(57) **ABSTRACT**

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(52) **U.S. Cl.**

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A balloon catheter includes a balloon which is both of high strength and radiopaque. The balloon includes an outer strengthened layer which includes a strengthening element at least partially embedded within the layer. Concentrically within the strengthened layer there is a radiopaque layer which includes a high concentration of radiopaque material distributed in the radiopaque layer. The strengthened layer acts as a support to the radiopaque layer which is otherwise be unable to withstand the pressure to which the balloon is normally inflated for deployment and in the course of a medical procedure. The structure provides a high strength radiopaque balloon with a relatively thin balloon wall optimizing balloon flexibility and wrappability. There is also disclosed a method of making a balloon which uses an internal support layer in a raw tubing which is then removed following formation of a balloon.

**11 Claims, 3 Drawing Sheets**

